

**Request to Archive  
With The National Centers for Environmental Information  
For Hurricane Satellite (HURSAT) B1, Version 6.0  
Provided by NCEI**

**2016-12-02**

This information will be used by NCEI to conduct an appraisal and make a decision on the request.

**1. Who is the primary point of contact for this request?**

Ken Knapp  
NCDC  
828-271-4339  
Ken.Knapp@noaa.gov

**2. Name the organization or group responsible for creating the dataset.**

DOC/NOAA/NESDIS/NCEI > National Centers for Environmental Information, NESDIS, NOAA, U.S. Department of Commerce

**3. Provide an overview summarizing the scope of data you want to archive. Describe the outputs, data variables, including their measurement resolution and coverage.**

The Hurricane Satellite (HURSAT) from derived International Satellite Cloud Climatology Project (ISCCP) B1 observations of tropical cyclones worldwide data consist of raw satellite observations. The data derive from the global constellation of geostationary satellites (GOES, Meteosat, MS, and FY2 series) spanning 1978 through 2014 (and into the future) The data include infrared window, visible and other channels available from the satellite instruments. IBTrACS data were temporally-interpolated to match the satellite data temporal resolution. The satellite data were then gridded to 8km, with grid centers fixed on the tropical cyclone center of circulation at 3-hour intervals. Data include hurricanes from the Atlantic, Pacific and Indian Ocean Basins. Data are provided in a convenient NetCDF format which is self-documenting and follows standard storage and metadata conventions. Since the B1 data in general consists of many different formats a uniform B1 format (B1U) was developed to contain all the data, but in a consistent format. The B1U format is a flat binary format with headers providing metadata along with the imagery. Version 6 supersedes all other versions.

**4. What is the time period covered by the dataset? (YYYY-MM-DD, YYYY-MM or YYYY)**

From 1978-01-01  
Ongoing as continuous updates to the data record

**5. Edition or version number(s) of the dataset:**

version 6

**6. Approximate date when the dataset was or will be released to the public:**

2017-01-16

**7. Who are the expected users of the archived data? How will the archived data be used?**

Jim Kossin and others at UW/SSEC  
Hurricane researchers - forecast tool development, climate analysis, analysis tool development

**8. Has the dataset undergone user evaluation and/or an independent review process? Did NCEI participate in design reviews?**

This is a revision and update for HURSAT B1 v05.

It is an update since I am expanding the period of record past 2009 (which is when v05 ended).

It is a revision since I have enhanced the data QC and added other variables to the netCDF file.

It is a new request since it will include ongoing (annual) updates.

The HURSAT-MW will likely be terminated since it is obsolete by a product by Josh Cussoth (NRL): Microwave Imagery from NRL TC Webpage (MINT) [see accompanying archive request]. Unsure of when he plans to submit request to archive.

The HURSAT-AVHRR has had very few users and will only be updated given sufficient requests from the user community.

**9. Describe the dataset's relationship to other archived datasets, such as earlier versions or related source data. If this is a new version, how does it improve upon the previous version(s)?**

This is an update of HURSAT B1 v05.

There will be no update of HURSAT AVHRR or HURSAT MW.

We have an existing SA, AB-SA-00009\_R1

**10. List the input datasets and ancillary information used to produce the data.**

The input datasets are IBTrACS and ISCCP B1U data.

**11. List web pages and other links that provide information on the data.**

<http://www.ncdc.noaa.gov/hursat/>

**12. List the kinds of documents, metadata and code that are available for archiving. For example, data format specifications, user guides, algorithm documentation, metadata compliant with a standard such as ISO 19115, source code, platform/instrument metadata, data/process flow diagrams, etc.**

1. A user readme with descriptions of each netCDF variable will be provided.

**13. Indicate the data file format(s).**

1. netCDF-4

**14. Are the data files compressed?**

netCDF-4/HDF5 compression

**15. Provide details on how the files are named and how they are organized (e.g., file\_name\_pattern\_YYYYMM.tar in monthly aggregations).**

Filenames are in the form of:

SIPs will be tar balls, with one tar file per tropical cyclone (similar to what was delivered with v05).

**16. Explain how to access sample data files and/or a file listing for previewing. If it is not available now, when will it be available?**

Sample data files can be provided on FTP or via email.

Sample files are ready now, and will be placed on FTP upon request.

**17. What is the total data volume to be submitted?**

**Historic Data:** all historic data or data submitted as a completed collection.

Total Data Volume: 150GB

Number of Data Files: 3797

**Continuous Data:** data volume rate for a continuous data production.

Total Data Volume Rate: 5GB per Year

Data File Frequency: 120 per Year

Data Production Start: 2017-12-31

**18. Are later updates, revisions or replacement files anticipated? If so, explain the conditions for submitting these additional data to the archive.**

Further updates will likely occur on an annual basis for this data.

**19. Describe the server that will connect to the ingest server at NCEI for submitting the data.**

Physical Location: Asheville, NC

System Name: glaze

System Owner: NCEI

Additional Information:

**20. What are the possible methods for submitting the data to NCEI? Select all that apply.**

1. FTP PULL
2. FTP PUSH
3. SFTP PUSH

**21. Identify how you would like NCEI to distribute the data. Web access support depends on the resources available for the dataset.**

1. User interface to order and stage data for download
2. Direct download links

**22. Will there be any distribution, usage, or other restrictions that apply to the data in the archive?**

No known constraints apply to the data.

**23. Discuss the rationale for archiving the dataset and the anticipated benefits. Mention any risks associated with not archiving the dataset at NCEI.**

The dataset is produced by NCEI for tropical cyclone analysis and study.

**24. Are the data archived at another facility or are there plans to do so? Please explain.**

No

**25. Is there an existing agreement or requirement driving this request to archive? Have you already contacted someone at NCEI?**

Yes. Data has been archived in the past and should be archived again as data are updated.

**26. Do you have a data management plan for your data?**

No

**27. Have funds been allocated to archive the data at NCEI?**

No

**28. Identify the affiliated research project, its sponsor, and any project/grant ID as applicable.**

N/A

**29. Is there a desired deadline for NCEI to archive and provide access to the data?**

Archive by: 2017-01-16

Accessible by: 2017-01-30

**30. Add any other pertinent information for this request.**

None